

AMENDMENTS TO THE CLAIMS

Applicant respectfully requests the following amendments to the claim set.

1. (previously presented) A method of controlled delivery of analgesic through a patient's skin to a patient's body comprising:

delivering an analgesic through the skin of a patient at a delivery site on said skin;
applying a temperature modification apparatus proximate to said delivery site on said skin, said temperature modification apparatus capable of controlling and selectively modifying a magnitude and duration of heat to achieve selective, precise, on-demand delivery of said analgesic through said skin; and
heating said skin with said temperature modification apparatus to a pre-determined temperature range for a pre-determined duration of time.

2. (previously presented) The method of Claim 1, wherein said temperature modification apparatus comprises:

a shallow chamber defined by an air impermeable material, said chamber having at least one side that allows air to enter into said chamber at a pre-determined rate; and
a heat generating medium disposed within said chamber.

3. (previously presented) The method of Claim 2, wherein said shallow chamber comprises an adhesive disposed on at least one side of said chamber.

4. (previously presented) The method of Claim 2, wherein said temperature modification apparatus further comprises means to affix said shallow chamber to a dermal drug

delivery system, said means to affix to a dermal drug delivery system being an adhesive that has the characteristic of being less adhesive to the dermal drug delivery system than the adhesion between said dermal drug delivery system and said human skin.

5. (previously presented) The method of claim 2, wherein said heat generating medium comprises activated carbon and iron in a pre-determined ratio.

6. (previously presented) The method of claim 2, wherein said heat generating medium further comprises sodium chloride and wood powder.

7. (previously presented) The method of claim 1, wherein said temperature modification apparatus further comprises a substantially two-dimensional device comprising a resistor layer capable of generating heat when supplied with electricity, means to affix said substantially two-dimensional device to human skin, and means to supply electric currents to said resistor layer.

8. (previously presented) The method of claim 7, wherein said means to supply electric current to said resistor layer comprises means to regulate the amount of electric current supplied to said resistor layer.

9. (previously presented) The method of claim 8, wherein said means to regulate the amount of electric current supplied to said resistor layer is capable of doing so according to the temperature generated by said substantially two-dimensional device.

10. (previously presented) The method of claim 8, wherein said means to regulate the amount of electric current supplied to said resistor layer comprises a thermistor.

11. (previously presented) The method of claim 1, further comprising the step of discontinuing said heating of said skin when further continuation of said heating would be injurious to the patient.

12. (previously presented) The method of claim 1, further comprising the step of discontinuing said heating of said skin when continuation of said heating would cause an adverse affect to the patient.

13. (previously presented) The method of claim 1, wherein said step of heating said skin includes heating said analgesic.

14. (previously presented) The method of claim 1, wherein said pre-determined temperature range is between about 38° C and 45°C.

15. (previously presented) The method of claim 23, further comprising the step of discontinuing said heating when said patient's said breakthrough pain diminishes.

16. (cancelled) The method as claimed in Claim 1, wherein the temperature modification apparatus is capable of generating controlled heat, said controlled heat having a

predetermined temperature range and a predetermined time duration.

17. (currently amended) The method of claim 1, wherein said pre-determined temperature is below about 60°C.

18. (cancelled) The method in Claim 1, wherein the temperature range is between about 38 to about 45°C.

19. (previously presented) The method as claimed in Claim 1, wherein said pre-determined temperature range is between about 39° C and 44°C.

20. (previously presented) The method of Claim 2, wherein said air impermeable material comprises a pre-determined number of openings having a pre-determined size, said openings capable of maintaining said pre-determined rate of air flow into said chamber.

21. (previously presented) The method of claim 2, wherein said air impermeable material comprises a pre-determined air permeability factor.

22. (previously presented) A drug delivery system comprising:
a transdermal drug patch for delivering an analgesic transdermally when said patch is
applied to a patient's skin, and
a temperature control apparatus secured to said patch, said temperature control apparatus

being capable of controlling and selectively modifying a magnitude and duration of heat to achieve selective, precise, on-demand delivery of said analgesic through said skin, wherein said temperature control apparatus heats said patch and said patient's skin proximate said patch to a pre-determined temperature range for a pre-determined duration of time when said patch is disposed on said patient's skin and when said temperature control apparatus is secured to said patch.

23. (previously presented) The method of claim 1, wherein said step of applying a temperature modification apparatus proximate to said delivery site on said skin is performed when said patient starts to feel the onset of breakthrough pain.